

Maintenance and Operations Department
AUP for Academic Year 2021-2022
November 2020

Describe Department/Unit

Connection to College Mission

The Maintenance and Operations (M&O) department supports Cerro Coso Community College (CCCC) campuses by ensuring that the physical resources at all locations where CCCC offers courses, programs and services are constructed and maintained. Utilizing physical resources to assure access, safety, security and a healthful learning and working environment to all students, staff, faculty and the community at large.

Report on Improvements Made and Gaps Identified in the Prior Year

Student Equity: Actions Taken

None, at this time there are no equity gaps identified with the M&O department. The department will work with the research department to review all equity areas for gaps.

Student Equity: Gaps to be Addressed

No Gap Identified

Gap Identified:

Outcomes Assessment: Actions Taken

Actions taken in the prior academic year

School dude has been an excellent tool to track and manage work orders for M&O staff. Getting staff trained on how to use the system has been the primary focus in the previous year.

Assessments completed in the prior academic year

An assessment was conducted in 2019, and upon review, M&O is continuing to teach internal staff members how to better utilize the system and complete school dudes.

Outcomes Assessment: Gaps to be Addressed

Program Review: Actions Taken

Maintenance and Operations

Year of Last Program Review:

2018

Actions Taken in the Prior Year to Address Strategies:

First program review for Maintenance & Operations

Strategies Still to be Addressed:

Maintenance and Operations

Year of Last Program Review:

2018

Actions Taken in the Prior Year to Address Strategies:

Strategies Still to be Addressed:

Completion of (IWV) Main Building Modernization. Currently all Water Conservation

Maintenance and Operations

Year of Last Program Review:

2018

Actions Taken in the Prior Year to Address Strategies:

- Completion of main building modernization project. All work is now 100% complete, and the one year warranty period has expired with the exception of the security alarm, and electronic door lock systems, which will expire in June 2021.
- School dude reporting is now being done every two weeks. Working with Office of Institutional Research, develop a better process for gathering and reporting out data that can be captured in School Dude as a means to better assess the work of the unit and Administrative Unit Outcomes.
- Initiate the project to improve the facilities and learning environment at the Kern River Valley campus. This initiative has been canceled, due to the downsizing of the KRV campus.
- Manage and complete projects associated with Measure J.

Strategies Still to be Addressed:

Continue to complete strategies, to save the college money on utilities,

Complete updating of grounds and outside common spaces, making them inviting and creating spaces for student life / learning.

- Develop inventory an inventory of all equipment and resources and develop a schedule for short term and long term replacement and maintenance plans.
- Develop a tool for gathering input and satisfaction from college service recipients.
- Renew and refine communication strategies to make all college constituents are aware of how to access, submit and initiate such processes as, School Dude, Event Planning Form, Incident/Accident Form, etc. to increase usage. This is an ongoing effort.
- Replace aging and mechanically failing M&O vehicles to better facilitate the work of the unit.
- Work with IT department to develop professional development opportunities to improve basic computer literacy as need for M&O employees.

- Manage and complete projects associated with Measure J.

Annual Planning: Actions Taken

Main building support

- Through out the school year, custodial staff and the M&O director have been working closely to fine tune cleaning practices, and learn the routines of the resident's within the main building. The Action Plan is now complete.

Implement event planning software

- Initial estimates of implementing a planning software exceed \$5,000 annually per campuses. Software is an extension of school dude, and with COVID-19, no events are being held. Once KCCD returns to school, further exploration of event software will take place.

Develop replacement plans for college wide systems

- With a new M&O director, IWV and ESCC have begun the process of developing a replacement plan for plant equipment, vehicles and equipment.

Review of Current Year Initiatives

Reminder of Initiatives for the Current Year

Lighting

- Currently the only system left to see a full upgrade is the LRC, GYM, CDC, and M&O buildings. Lighting software is outdated and non-functioning, however, the bulk of this will be fixed when the automation server is upgraded in January 2021. LRC needs replacement of exterior lights that where not available until recently, and interior "can" lighting. The Gym has outdated T-8 fixtures that will be retrofitted in a future measure J project. The M&O building is being replaced, with a new structure as part of a measure J project and will be fully LED.

Water conservation

- On going measure J project that is producing topographical maps, to show plant types, quantities, as well as current watering system. The end goal of the project is to identify plants that can be thinned out or removed to keep an welcoming appearance, and save water. The end goal of the project is to identify ways to save water on the campus, and reduce utility costs.

Plan Initiatives for Next Year

Initiatives for Next Academic Year

Surplus of Materials

Is this part of a multiyear initiative?

Yes

Specific Action Steps to be Taken:

After the main building modernization, a large amount of furniture, and mechanical equipment is left over. Nearly all of this material has been sitting in the elements, and is no longer usable.

Lead Measure of Success:

An inventory of all excess items will take place to identify the quantity and type of materials that are needing surplus. At such time, a quantifiable figure will allow M&O to track the percentage of surplus material being sold and/or discarded.

Are any of the lead measures identified above lacking assessment instruments?

Yes

Does the department request help to develop these instruments?

No

Lag Measure of Success:

With a known quantity of material inventoried, M&O will be able to see success when the percentage of surplus material disposed of reaches 100%.

Person Responsible:

Director M&O

Other

This initiative will be explained in extensive detail in the upcoming program review in calendar year 2021.

Which strategic goal does this initiative address?

Goal 5: Strengthen Organizational Effectiveness

Professional Development

Is this part of a multiyear initiative?

Yes

Specific Action Steps to be Taken:

- Each employee will attend at minimum, 16 hours of leadership development or leadership seminars or webinars. Or, attend a trade school or online training, further enhancing their job skills.

Lead Measure of Success:

Researching appropriate job training and provisional development courses for each employee, and securing funding for the training.

Are any of the lead measures identified above lacking assessment instruments?

Yes

Does the department request help to develop these instruments?

Yes

Lag Measure of Success:

Identifying current efficiencies of employees, utilizing Lean Six Sigma to find areas of improvement that can be made through professional development and job training.

Person Responsible:

Director M&O

It addresses a program review strategy

This is part of the 2021 school year unit plan for maintenance and operations.

Which strategic goal does this initiative address?

Goal 5: Strengthen Organizational Effectiveness

Evaluate Resource Needs

Facilities

IWV Campus:

These are large ticket items that will require a couple of years of planning and in some cases engineering such as the LRC chiller, boilers and VFD's.

Replace chiller / boilers for the LRC these units are coming to the end of their life cycle of 20 years. These units are currently operational as long as we keep the factory service on them and the experts do the annual maintenance. As the units age it becomes harder to find parts for them.

Replace aging Variable Frequency Drive (VFD) units in the LRC, these units drive the air flow throughout the building. While there haven't been many issues with the existing unit they are reaching the end of their life cycle.

Replace carpet in the LRC which was identified in previous years planning documents. The carpet is nearing the end of it's life cycle and will start becoming a hazard as it ages further.

- Purchase two new electric utility carts for Plant Engineer, and Skilled trades. New carts are needed, so trades professionals can lock up and store valuable tools and equipment, instead of loading and unloading carts daily. Currently M&O employees do not have enough carts to allow for staff to transport tools, equipment, and janitorial waste around campus, and end up walking carrying heavy loads. Cost of carts, are \$33,000; carts are like models to what is currently on site, requesting Carryall 500 Facilities Engineering Van Box system, with electric drive.

- New janitorial equipment needed for expansion of athletic facilities, and construction of two new buildings totaling 17,000 sqft. Require \$10,000 to purchase equipment and materials.

- Require tank mounted pump, sprayer, and tank system for spraying pesticides on more then 200 acres of the campus quarterly. Requesting \$3,000, as this system will provide an ergonomic solution vs. carrying a 60 pound backpack daily, for weeks at a time.

ESCC Bishop Campus

- Paint interior of building.

- Add external hose bibs to supply water for cleaning sidewalks and other uses.

- Install Water Meters, and Water Treatment system.

- Install storage shed, side walk to chillier yard, and concrete pad in chillier yard for storage shed: \$12,000.

- Install utility sinks in art

ESCC Mammoth Campus

- Paint interior of building.

- Require new vehicle for Site Operations Specialist to operate between the Mammoth and Bishop Campus. Current vehicle is a 1995 Ford Ranger, Request a new 4x4 1/2 ton pickup, to accommodate the movement of tools, equipment, landscape waste, and supplies between the ESCC sites, and vendors. \$40,000 one time cost, or \$5,500 annually with a GSA leased vehicle.

Information Technology

As part of the Building HVAC automation upgrades during the 20/21 school year, it was identified, that the two trades employees do not have the required training to operate the systems efficiently. Systems are set in automatic mode and rarely touched to fine tune energy consumption and equipment use. Suggest getting employees trained on AMAG door lock systems, and Simplex Fire Control Panel Systems. This training will result in some IT equipment such as tablets or laptops that can speak to the localized stations. Approximate cost of equipment \$3,000.

Marketing

No marketing currently required. However, future projects will require marketing to help advertise multi-million dollar construction projects. These ad campaigns will be paid for and organized through the KCCD facilities department.

Professional Development

As part of the Building HVAC automation upgrades during the 20/21 school year, it was identified, that the two trades employees do not have the required training to operate the systems efficiently. Systems are set in automatic mode and rarely touched to fine tune energy consumption and equipment use.

- Suggest getting employees trained on AMAG door lock systems, at \$299 per course thru IPVM.
- Simplex Fire Control Panel Systems.
- Niagara Control System Training: \$2,600 per employee, thru M.O.V Training Services.

Research and Data

Director of M&O has begun sending bi-weekly school dude updates to Managers, Facilities Committee members, and Faculty Chairs. This has increased communication between campus leads, and provides a more transparent look at available data for repairs being made.

Director of M&O will be working with Institutional Research to develop a survey on how M&O can better serve the campuses.

Staffing Requests

1000 Category - Certificated Positions

2000 Category - Classified Staff

Maintenance Worker

Location:

Ridgecrest/IWV

Salary Grade:

36.5

Number of Months:

12

Number of Hours per Week:

40

Salary Amount:

\$35,556.84 (monthly \$2,963.07)

Justification:

Maintenance Staff needs to be increased by at least 2 Full Time Employees (FTE); requesting one Maintenance and Operations Technician to work out of Ridgecrest, and support all Cerro Coso campuses. The M&O department does not have enough staffing to support a preventive maintenance program. Maintenance on campus has been deferred, due to a lack of trades employees, degrading equipment functionality, and performance. There is simply not enough people to do the work required, and there are no staff members hired and assignable to complete these job duties currently. Maintenance technicians spend most of their time on customer requests and repair work orders. With the addition of a skilled maintenance worker, existing building support systems and equipment can be better maintained, and repaired to sustain operation. The International Facility Management Association (IFMA) surveyed over 650 Operations and Maintenance organizations to compile benchmarks for maintenance staffing requirements. Over 650 facility organizations participated in the survey and the results were tabulated in IFMA's Operations and Maintenance Benchmark Research Report #26. The report lists overall maintenance staffing levels based on facility size and staffing ratio of one maintenance FTE per 47,000 square feet. The Maintenance and Operations Department currently employs 2 trades' staff to maintain approximately 274,000 square feet (GSF) of space. When applying the IFMA benchmark, a total of 5.61 FTE's are required to maintain the Maintenance Department's current facilities. This equates to a staffing shortage of 3.612 FTE's.

Facilities and Grounds Maintenance Supervisor

Location:

Ridgecrest/IWV

Salary Grade:

40.5

Number of Months:

12

Number of Hours per Week:

Salary Amount:

\$43,322.64 (Monthly \$3,610.22)

Justification:

The Grounds department is currently staffed by 3 Full time Employees (FTE) to maintain 320 acres of campus, softball, baseball, track and field stadium, planters and hardscape around the campus. Requesting one Facilities and Grounds Maintenance Supervisor to take over duties to coordinate work schedules, ordering, inventorying, training, operating ground equipment and tools, and monitoring of campus grounds and building repairs. In addition the position will help fill the gap in the M&O department, providing trades professionals to spend more time on task vs. doing clerical duties that this position can be assigned. Currently these functions are done by the Director of Maintenance & Operations; who can provide over site, but does not have the availability to complete duties full time, which has led to neglect over the years of the grounds.

Water management is a large function of the grounds supervisor, and with better management, water usage can be cut by 40%, which will provide savings to afford this employee position. Additional support is needed for routine grounds maintenance and outdoor athletic event support.

APPA (The Association of Higher Education Facilities Offices) formula for Grounds staffing reflects the standard ratio is 12 acres per Grounds worker. Cerro Coso's 320 acre campus has 6.3 acres of buildings, and 200 acres of grounds requiring maintenance which includes athletic fields. When applying this benchmark 16.66 FTE's are required to maintain the current grounds areas on campus. This equates to a staffing shortage of 13.66 FTE's.

Custodial I**Location:**

Ridgecrest/IWV

Salary Grade:

31.5

Number of Months:

12

Number of Hours per Week:

40

Salary Amount:

\$27,777 (\$2,314.75, Monthly)

Justification:

Requesting two (2) additional custodians to maintain new Athletic Complex, which is adding over 21,000 sqft. of interior spaces needing to be cleaned.

Although measures have been taken to maximize our custodial staff's resources, we are still understaffed in the custodial department. Cerro Coso has approximately 274,000 square feet of space, with an additional 21,000 sqft of space being added in the next 18 months, totaling more than 295,000sqft of buildings that need cleaned daily.

The industry's square foot average for cleaning (per custodian) is 25,000 sq. ft. of space to achieve the lower end of adequate cleaning for a campus. Cerro Coso is currently staffed with five full time employees (FTE) custodians, and they are currently cleaning an average of 54,800sqft. per custodian which is not generally acceptable for a school environment, and more then double the lowest standard. When applying the California Association of School Business Officials (CASBO) formula (which calculates the

number of custodians required to maintain individual school buildings), a total of 10.96 FTE's are required to clean the facilities. This equates to a staffing shortage of 5.96 FTE's. Once the new athletic facility is completed, we will have a staffing shortage of 6.8 11.98 FTE's, and Cerro Coso needs 11.98 FTE custodians to maintain the lowest level of clean. Note: that custodial staff are on site, seven days a week, from 6am - 11pm Monday -Friday, and eight hours daily Saturday and Sunday.

The addition of custodians will improve cleaning and support for our campus but still leave us understaffed.